

39.—CERITHIDEA KIENERI.

Cerithium Kienneri, Homb. et Jacq. Voy. au Pole Sud. Moll., text, p. 96. Atlas, pl. 23, fig. 4-5.

Cerithium Kieneri, Sowerby, Thes. Conch., vol. 2, p. 886, pl. 186, fig. 272.

Cerithidea Kieneri, Reeve, Conch. Icon., Cerithidea, pl. 1, sp. 6.

Hab. Cape York, North Australia. Found some six feet from the ground, attached by a glutinous matter on the trunks of large *Rhizophora*. Katow, New Guinea. One specimen found on the beach, dead.

40.—PIRENELLA LAYARDI.

Cerithidea (Pirenella) Layardi, A. Adams, Proc. Zool. Soc., Lon., 1854, p. 86.

Cerithium Layardi (Pirenella), Sowerby, Thes. Conch., vol. 2, p. 882, pl. 185, fig. 257.

Tympanotomus Layardi, Reeve, Conch. Icon., vol. 15, Tympanotomus, pl. 1, sp. 2a.

Hab. Mud Bay, Cape York; found on sandy mud flats at low water.

The Ichthyology of the Chevert Expedition, by HAYNES GIBBES ALLEYNE, M.D., and WILLIAM MACLEAY, F.L.S.

II.

FAMILY SCOMBRIDÆ.

55.—ECHENEIS NAUCRATES.

Echeneis Remora, Aldrovandi, 3, ch. 22, p. 355. Jonston, Thaumatochr. 1, lib. 1, cap. 2, art. 4, tab. 4, fig. 3, tab. 39, fig. 8. Marcgr. Iter. Bras., p. 180. Gottorff, Kuntzkammer, tab. 25, fig. 2. Willoughby, p. 119, tab. g. 8, fig. 2. Ray, Syn., p. 71. Ruych. Theatr. Univ. p. 7. tab. 4, fig. 3; tab. 39, fig. 8. Seba 3, p. 103, tab. 33, fig. 2. Dutertre, Hist. Gen. des Antilles, 2, p. 299, fig. opp. p. 222. Brown, Hist. Jamaica, p. 443.

Echineis naucrates, L. Syst., 1, p. 446, Hasselg., Iter. Palest., p. 324. Schœpff, Schrift., Gesselsch, Naturf. Freunde, Berlin 8, 3, p. 145. Bl. 2, p. 131, tab. 171. Bl. Schn., p. 239. Lacep. 3, pp. 146-162, pl. 9, fig. 2. Shaw Zool. 4, p. 209, pl. 31. Cuv. Regne. Anim. Storer Rep. Fish. Massach p. 153. Mich. Trans. Lit. and Phil. Soc. New York 1, p. 377. Richards Faun. Bor. Amer. 3, p. 266, and Ann. and Mag. Nat. Hist. 11, 1843, p. 498. Cant. Catal., p. 199. Faun. Japan. Poiss., p. 270, p. 120, fig. 1. Richards Ichthyolog. Chin., p. 203. Guich. Explor. Alger. Poiss., p. 111. Webb and Berthall, Iles Canar. Poiss., p. 87. Gunth. Ann. and Mag. Nat. Hist., May, 1860, p. 395.

Echineis, sp. Gronov., Zoophyl, p. 75, No. 252, and Mus. Ichthyol. 1, p. 13, No. 34. Klein Miss. Pisc., 4, p. 41, No. 2.

Pegador, Parra, p. 94, pl. 36, fig. 2.

Ala Mottah, Russell, 1, p. 39, pl. 49.

Echineis albicanda, Mich. Am. Mon., Mag 2., p. 244.

„ „ *lunata*, Bancr. Proc. Comm. Zool. Soc. 1, p. 134, and Zool. Jour. S, p. 411, pl. 18.

„ *Australis*, Griff. Anim. Kingd., pl. —, p. 504; Bennett, Whal. Voy. 2, p. 273.

„ *vittata*, Lowe Proc. Zool. Soc., 1839, p. 89; 1850, p. 252, and Trans. Zool. Soc., p. 17.

„ *vittata*, Rüpp. N. W. Fische, p. 82.

„ *albicanda*, Dekay N. York Faun., Fishes, p. 307, pl. 54, fig. 177.

„ *fusca*, Gronov. Syst., ed. Gray, p. 92.

Skeleton, Agass., Recherches Poiss., Tass. 4, tab. G.

The above long list of references and synonyms is taken from Günther's Catalogue, and is no doubt very complete and correct. It will give an idea of the great amount of interest which this remarkable group of fishes has always excited among naturalists, and also illustrates the many mistakes authors have fallen into from their unacquaintance with the great diversity of appearance in these fish at different periods of their growth.

A number of large specimens, about thirty-two inches long, of this species accumulated round the Chevert, when lying at anchor

for ten days off Darnley Island, and several were taken by the hook. They seemed generally to adhere to the sides of the ship near the bows by means of their suckers, but whenever anything edible or looking like it was thrown from the ship, a number of them would at once detach themselves and make a dash at it. These were all full-grown fish, and had slightly bilobed tails. Young specimens about seven inches long taken at Cape York and Warrior Reef present a very different appearance. The middle rays of the tail are elongate, and the outer rays of the tail and the tips of the first portion of the soft dorsal and anal are of a yellowish white. The number of plates on the suctorial disk is in one of the young specimens twenty-four, in all the others twenty-three.

FAMILY CARANGIDÆ.

56.—CARANX ARMATUS.

Sciæna armata, Forsk., p. 53. Gm. L., p. 1306. Russell, pl. 151, p. 38 (Young).

Citula plumbea, Quoy and Gaim., Voy. Freyc. Zool. Poiss., p. 361.

„ *ciliaria*, Rüpp. Atl. Fische, p. 102, tab. 25, fig. 8.

„ *armata*, Rüpp. Atl. Fische, p. 103, and N. W. Fische, p. 50.

Caranx citula, Cuv. and Val. 9, p. 126.

„ *armatus*, Cuv. and Val. 9, p. 127; Cantor Catal., p. 131.

„ *ciliaris*, Cuv. and Val. 9, p. 129 (Young); Faun. Japan. Poiss., p. 112; Richards Ichth. China, p. 276.

„ *cirrhusus*, Cuv. and Val., pl. 250.

Olistus malabaricus, Cuv. and Val. 9, p. 137, pl. 251; Cuv. Regn. Anim., Ill. Poiss., pl. 58, fig. 1.

„ *RüPELLII*, Cuv. and Val. 9, p. 144.

Carangoides citula, Blecker Verh. Bat. Gen. 24, Makr., p. 65.

This species was found at Cape York and New Guinea.

57.—CARANX HIPPOS.

Guara terebra, Marcgr., p. 172; Seba, 3, 27, 3.

Scomber hippos, Linn. Syst. Nat. 1, p. 494 (not Mitch.); Bl. Schn., p. 28; Forst. Descr. Anim. cur. Licht., p. 192.

Scomber hippos Kleinii, Bl. taf. 347, fig. 2; Bl. Schn., p. 30. Russell 2, pl. 148.

Caranx fallax, Cuv. and Val. 9, p. 95; Castalu. Anim. Nouv. or Rares Poiss., p. 22; Guich. Poiss. in Sagra Hist. Cuba, p. 111.

„ *sem.* Cuv. and Val. 9, p. 105.

„ *Forsteri*, Cuv. and Val. 9, p. 107; Cant. Catal., p. 127. Bleeker Verh., &c.

„ *sexfasciatus*, Quoy. and Gaim. Voy. Freyc., p. 351, pl. 65, fig. 4; Cuv. and Val. 9, p. 110 (Young).

Caranx Lessonii, Cuv. and Val. 9, p. 113; Less. Voy. Coq. Poiss., p. 155, pl. 31, fig. 1.

„ *bellangerii*, Cuv. and Val. 9, p. 116.

„ *defensor*, DeKay, New York Fauna, p. 120, pl. 24, fig. 72; Holbr. Ichth. S. Carolin., p. 85, pl. 12, fig. 1 (eye too small).

„ *flavo-caruleus*, Schleg. Faun. Japan., p. 110, pl. 59, fig. 2.

„ *parapistes*, Richards Ichthy. Voy. Erebus and Terror, p. 136, pl. 58, fig. 6, 7.

This fish was taken abundantly in the net about Cape York.

58.—CARANX CHEVERTI.

Plate X., fig. 1.

D. $8\frac{1}{2}$. A. $2\frac{1}{3}$.

Teeth viliform, exceedingly minute. Vomer prominent and toothed. Height of body nearly three and a half times in the total length. Head about one-fourth of the same. The maxillary* scarcely reaches the vertical from the anterior margin of the orbit. The lateral line is very slightly curved in front; the straight portion commences about the vertical from the posterior third of the soft dorsal fin, and is slightly keeled on the tail only. The dorsal fin is low, the first five rays being slightly elongate. The anal is similar to the dorsal. The pectoral fins reach to about the line of the third dorsal ray. There is a very distinct black spot

* In the previous paper, where the term upper maxillary is used, the maxillary bone is meant.

between the lateral line and the root of the pectorals, a part of it being on the operculum. Coloration silvery blue above, silvery white below.

One specimen, five inches long, of this well-marked species was got at Katow, New Guinea. The teeth are so very fine that it is difficult even with a lens to detect them.

59.—*CARANX LATICAUDIS.*

Plate X., fig. 2.

D. $8\frac{1}{8}$, A. $\frac{1}{5}$.

Fine viliform teeth on the jaws, vomer, and tongue. Height of body two and one-third in the total length. Head four and a-half in the same. Snout rounded, and distant from the eye more than the diameter of the orbit. The maxillary reaches to the vertical from the anterior margin of the orbit. Crest keeled. Breast naked. The lateral line is slightly curved, the straight and keeled portion commencing at about the vertical from the posterior fourth of the soft dorsal fin. Dorsal and anal fins low and uniform, the first five rays of each a little elongate. Pectoral fin one-third of the entire length of the fish. Caudal fin wide-spreading, and exceeding in height the whole body. Coloration silvery, darker on the back than below. The dorsal, anal, and caudal fins are slightly blackish. No opercular spot.

One specimen, twelve inches long, of this handsome fish was taken in Hall Sound.

Both this and the preceding species will fall into the subdivision of the genus *Caranx*, which Günther (Cat Fish, Brit. Mus., vol. 2, p. 424) commences with the species *Lioglossus*.

60.—*CARANX PAPUENSIS.*

Plate X., fig. 3.

D. $8\frac{1}{2}$, A. $2\frac{1}{7}$.

Viliform teeth on the upper jaw, with an outer series of larger and somewhat recurved ones; those on the lower jaw in a single series, small, and rather recurved. Teeth on the vomer. The height of the body is equal to a third, and the length of the head

to a fourth of the total length. The maxillary reaches to the vertical from the anterior third of the eye. Breast scaly. The lateral line is moderately curved on its anterior half. The straight part is strongly keeled, commences about the vertical to the sixth dorsal ray, and is composed of thirty-five plates. The pectoral fins extend to the ninth keeled scale of the lateral line. No opercular spot. Colouration silvery, darker on the back.

This specimen seems to correspond in several points with *Caranx lepturus* Agass., a fish supposed to belong to the Atlantic. The differences in the relative proportions, as well as in the dentition, justify us, we think, in describing this as a new species, more especially as Günther seems to have doubts as to whether the fish described in his Catalogue (Vol. 2, p. 447) as *lepturus* is really Agassiz's fish.

Two specimens, the largest six inches long, were taken at Hall Sound, New Guinea.

61.—*CARANX BUCCULENTUS*.

Plate XI., fig. 1.

D. $8\frac{1}{8}$, A. $2\frac{1}{8}$.

The teeth in the upper jaw are viliform, with an external row of conical teeth, about fourteen in number. The under jaw has a single series of smaller conical teeth. Teeth on the vomer, palatines, and tongue; those on the vomer in a triangular mass. The height of the body is one-third of the total length. The head is a little shorter than the height of the body. The diameter of the orbit is one-fourth of the length of the head, and is equal to the distance from the eye to the front of the muzzle. The distance between the eye is much greater than the diameter of the orbit. Mouth large, the maxillary extending to the vertical from behind the middle of the eye. Breast naked. The lateral line is very much curved on its anterior portion, and descends vertically to the straight and plated portion which commences in the vertical from the *fifth dorsal spine*. The first few rays of the soft dorsal and anal fins are elongate. The pectorals reach the ninth anal ray. Colouration silvery, darker towards the back. The dorsal

and caudal fins are tipped with black. There is a distinct black axillary spot, and an indistinct opercular one.

Two specimens, each ten inches long, were taken at Cape Grenville.

62.—*CARANX GEORGIANUS*.

Cuv. and Val. 9, p. 85; Jenyns Zool. Beagle, Fishes, p. 71; Richards Ann. and Mag. Nat. Hist., 1843, 11, p. 27; and Ichth. Voy. Ereb. and Terr., p. 135, pl. 58, fig. 1, 3.

Caranx platessa, Cuv. and Val., 9, p. 84.

This species, so well known in Port Jackson by the name of "White Trevally," seems to get less abundant in the warm seas of the North. Only one specimen was taken during the whole voyage of the Chevert, and that was in the comparatively cool latitudes of the Percy Islands.

63.—*CARANX EDENTULUS*.

Plate XI., fig. 2.

D. $7\frac{1}{20}$, A. $2\frac{1}{16}$.

No teeth perceptible either on jaws, vomer, or tongue. The height of the body is one-third, and the length of the head is one-fourth of the total length of the fish. The lips are rather thick and fleshy. The maxillary reaches to the vertical from the anterior third of the orbit. The eyes are small, about two diameters from the point of the muzzle, and three diameters apart. There is a ridge above the eye to the summit of the operculum. Breast scaly. The lateral line is slightly curved for two-thirds of its length; the straight portion commences below the posterior third of the soft dorsal fin, and is very slightly arched. The pectoral fins reach to the sixth anal ray. The detached anal spines are small. The tail is long and spreading. The colouration is bluish above and yellowish white below. The opercular and axillary spots are indistinct.

This species seems to approach nearest to *Caranx Rüppellii* of Gunther, the *C. petaurista* Rüppell. Several specimens, averaging about fourteen inches in length, were got at the Percy Islands.

64.—CHORINEMUS LYSAN.

? Dampier, Voy. N. Holl., pl. 3, fig. 5, p. 162.

Scomber lysan, Forsk., No. 67, pl. 54.

„ *Fosteri*, Bl. Schn., p. 26.

Scomberoides commersonianus, Lacep., 2, pl. 20, fig. 3. Russell, 2, p. 31, pl. 141.

Scomber Madagaceriensis, Shaw Zool. 4, p. 590, pl. 85. Bennett's Life of Raffles, p. 689.

Lichia lysan, Rüpp. Atl. Fische., p. 91.

Chorinemus commersonianus, Cuv. and Val. p. 370. Bleek Verh. Bat. Gen. 24, Makr., p. 44.

Chorinemus lysan, Cuv. and Val. 1, p. 387. Rüpp., N. W. Fisch., p. 44. Cant., Catalog., p. 118.

? *Chorinemus farkharii*, Cuv. and Val., 8, p. 388.

Chorinemus aculeatus, Cuv. and Val. 8, p. 384 (not Block.)

„ *Fosteri*, Richards Ann. and Mag. Nat. Hist., 1843, 11, p. 24.

This fish was taken on several occasions in the net at Cape York.

65.—CHORINEMUS TOLOO.

Toloo parah, Russell 2, p. 29, pl. 137.

Lichia-toloo-parah, Rüpp. Atl. Fische, p. 91.

Chorinemus toloo, Cuv. and Val. 8, p. 377. ? Bleek. Verh. Bat. Gen., 24, Makr. p. 45.

The description given by Gunther of this species does not accord very well with the specimens before us; but Count Castelnau mentions in a paper published by him, entitled "Researches on the Fishes of Australia," that he had received from South Australia a fish which is evidently identical with the fish before us, and he seems inclined to think that it is *C. toloo*. It seems curious that it should not have been previously noticed from Northern Australia, for it is very abundant about Cape York. There are in the collection from the same locality some small fishes (three inches long) which present a marked difference of appearance, but we are inclined to believe that they may be only

immature specimens. They are very compressed, have a crenulated appearance about the belly, corrugated lines on the sides, and are of the most brilliant silvery lustre.

66.—TRACHYNOTUS OVATUS.

Gasterostous ovatus, L. Syst. Nat. 1, p. 490.

Centronotus ovals, Lacep. 3, pp. 309-316.

Synonymy of Atlantic specimens.

Chætodon rhomboides, Block, taf. 209.

Acanthinion rhomboides, Lacep. 4, p. 500.

Spinous Dorey, Mitch. Trans. Lit. and Phil. Soc. New York, 1 pl. 6, fig. 10.

Trachinotus rhomboides, Cuv. and Val. 8, p. 407. Guich. Sagra, Cuba, p. 108.

Trachinotus fuscus, Cuv. and Val. 8, p. 410.

„ *teraia*, Cuv. and Val. 8, page 418.

„ *spinusus*, Dek. New York Faun. Fishes p. 117, pl. 19, fig. 53 (bad).

Lichia spinosa, Baird, 9th Smith's Rep., p. 336.

Doliodon spinosus, Girard Proc. Acad. Nat. Sc., Philad., 1858, p. 168.

Synonymy of the Indian specimens.

Scomber falcatus, Forsk. p. 57.

Cesiomorns Blockii, Lacep. p. 95, pl. 2, fig. 2.

Trachinotus falcatus, Lacep. 3, p. 79. Rüpp. Atl. Fische., p. 89. Cuv. and Val. 1, page 430.

Mookalee parah, Russell 2, p. 39, pl. 154.

Trachinotus mookalee, Cuv. and Val., 8, p. 423, Cantor Catal., p. 123. Bleeker Verh. Bat. Gen. 24. Makr., p. 48.

Trachinotus Blockii, Cuv. and Val. 8, p. 425.

„ *affinus*, Cuv. and Val. 8, p. 428.

„ *falciger*, Cuv. and Val. 8, p. 428.

„ *drepanis*, Cuv. and Val. 8, p. 429.

„ *auratus*, Richards Ichth. Chin., p. 270.

It will be seen from the foregoing long list of synonyms, taken from the British Museum Catalogue, that Dr. Gunther has merged in one no less than nine of Cuvier and Valenciennes' species.

The specimens in the Chevert collection are from the Percy Islands.

67.—TRACHYNOTUS BAILLONII.

Russell 2, pl. 142.

Cæsiomorus bailloni, Lacep. 3, p. 93, pl. 3, fig. 1.

„ *quadripunctatus*, Rüpp. Atl. Fische, p. 90, pl. 24, f. 1.

Trachinotus bailloni, Cuv. and Val. 8, p. 431; Bleek. Verh. Bat. Gen. 24, p. 46.

„ *quadripunctatus*, Cuv. and Val. 8, p. 434; Cantor Catal., p. 122.

„ *Russellii*, Cuv. and Val. 8, p. 436.

This species was also got at the Percy Islands.

68.—PLATAX TEIRA.

Chaetodon teira, Forsk., p. 60, tab. 22; Bl., tab. 199, fig. 1; L. Gm., p. 1265; Bl. Schn., p. 221; Shaw. Zool. 4, p. 365, pl. 260; Russell, pl. 87.

Platax teira, Cuv. Regne. Anim; Rüpp. Atl. Fische, p. 68, and N. W. Fische, pp. 33-37; Cuv. and Val. 7, p. 226; Cantor Catal. p. 168; Bleek. Verh. Bat. Gen. 23, Chætod. p. 28; Peters. Wieg. Archiv. 1855, p. 247.

„ *Leschenaldi*, Cuv. and Val. 7, p. 223.

„ *vespertilio*, Temm. and Schlgg. Faun. Japan, Poiss., p. 83, pl. 43.

One large specimen of this curious-looking fish was speared under the ship's side in Hall Sound, New Guinea.

FAMILY GOBIIDÆ.

69.—GOBIUS CRINIGER.

? *Gobius nebulosus*, Forsk., p. 24; Bl. Schn., p. 72; Cuv. and Val. 12, p. 84.

Gobius criniger, Cuv. and Val. 12, p. 82; Cant. Catal., p. 184; Bleeker Banka., p. 453; Richard's Voy. Ereb. and Terror, Ichthy. p. 2, pl. 1, fig. 3-4.

Taken at Darnley Island.

70.—GOBIUS ORNATUS.

Gobius ornatus, Rüpp. Atl. Fische., p. 135, and N. W. Fische, p. 137.

„ *ventralis*, Cuv. and Val. 12, p. 113.

„ *interstinctus*, Richard's Voy. Ereb. and Terror, Fishes, p. 3, pl. 5, fig. 3-6; Bleek. Naturk. Tydsch. Ned. Ind., 1851, 1, p. 249.

One specimen, in a very bad condition, from Darnley Island; we are not by any means certain of its identity.

71.—GOBIUS DARNLEYENSIS.

Plate XII., fig. 1.

D. $6\frac{1}{9}$ A. $\frac{1}{8}$ L. lat. 34.

All the teeth small. The height of the body is one-fifth of the length. The length of the head is the same. The eyes are half the diameter of the orbit apart, and one diameter from the point of the snout. The cleft of the mouth is slightly oblique, and extends to the vertical from the middle of the eye. The tail is long and obtusely pointed. The anal rays are longer than those of the soft dorsal. The pectorals are large and obtusely pointed, with the first few rays filamentose. The scales are much larger towards the tail. Coloration, greenish marbled and spotted with black. The fins and tail are greenish yellow, with their basal portions blackish. The position of the lateral line is marked by a ridge anteriorly, and a depressed line posteriorly.

This fish was found in considerable abundance in and about dead coral at Darnley Island. The average length is about four inches.

72.—GOBIUS NIGRIPINNIS.

• Plate XII., fig. 2.

D. $6\frac{1}{10}$ A. $\frac{1}{8}$ L. lat. 33.

Teeth small, conical ; an exterior row in the upper jaw longer than the others. The height of the body is one-sixth of the total length, and the length of the head is one-fourth of the same. The eyes are about the diameter of the orbit apart, and are about the same distance from the intermaxillary. The head is obtuse in front, and the mouth is slightly oblique. The scales are rather large towards the tail, which is long and obtusely pointed. The colour is greyish black. The fins are all more or less black. The dorsals are tipped with yellow.

This species was found at Palm Island. The length is about three inches.

There are a number of other species of *Gobius* in the collection which we find ourselves compelled to pass over for the present ; some because they are represented only by single or imperfect specimens, and others from an inability to satisfy ourselves that they had not been previously described by others.

73.—APOCRYPTES LINEATUS.

Plate XII., fig. 3.

D. $6\frac{1}{15}$ A. $\frac{1}{13}$ L. lat. 64.

Teeth distinct, conical, and sharp ; those on the lower jaw nearly horizontal with a recurved canine on each side. Height of body one-fourth of the length ; length of head one-fifth of the same. Scales becoming much larger towards the tail. Caudal fin obtusely pointed. Colouration, dirty white, with two black bands—one extending from the muzzle through the eye to the anterior third of the soft dorsal fin,—the second through the operculum and base of the pectoral fin to about the middle of the body. The first dorsal fin has a black patch extending more or less along its entire base ; the second dorsal has four elongate black basal spots extending to the body. There is also a well-marked spot at the base of the caudal fin.

This fish was taken in abundance at Cape Grenville. It seems to be very subject to variation. Some specimens are much more elongate than the one described, the height of the body being six times in the length, and many of them have two canines close together on one side of the lower jaw, though curiously enough we have never been able to detect them on both sides in any specimen. The average size of the species is three and a-half inches.

74.—GOBIODON VERTICALIS.

Plate XII., fig. 4.

D. $6\frac{1}{10}$, A. $\frac{1}{9}$,

Body very compressed. Profile vertical, with the mouth small and nearly in the centre. Eyes small and near the top of the head. Height of body nearly one-half of the total length. Ventral fins short. The body shows two longitudinal impressions—one near the back, the other near the belly, and the transverse lines of the muscles are very distinct. The colour is yellow, with all the fins more or less black.

This fish was found abundantly in the inmost recesses of dead coral, in positions where it had probably been born, and from which there could certainly have been little chance of escape. *Gobiodon histrio*, Cuv. and Val., is the nearest approach to this species of all those hitherto described. The much greater proportionate depth of *G. verticalis*, and the absence of tubercles on the forehead, will at once serve to distinguish them.

75.—GOBIODON CERAMENSIS.

Gobius ceramensis, Bleek, Ceram. 2, p. 704.

A good many specimens of what we believe to be this species were found in the same localities, and under the same circumstances as the preceding species. Its proportions are very different, and the profile is not vertical.



76.—PERIOPHTHALMUS AUSTRALIS.

Plate XI., fig. 3.

Casteln., Researches on the Fishes of Australia, p. 22.

As no figure has ever been given of this remarkable fish, we add one in the plates accompanying this paper. It was found to be abundant about Cape York, at the mouth of the Katow River, and at the mouths of all the streams flowing into Hall Sound. At low tide these fish are met with on the slimy banks and mangrove swamps at a considerable distance from the water, but they invariably make for it in a straight direction whenever they are frightened or disturbed by anyone. Their mode of progression is by a series of rapid jumps, springing apparently entirely from their very muscular pectoral fins.

77 —PERIOPHTHALMUS KOELREUTERI.

Valent. 3, p. 391, fig. 140; Renard. 1, p. 16, fig. 65; Saba. 3, p. 29, fig. 17; Koelreuter in Nov. Comm. Petrop. 8, p. 421.

Gobius Koelreuteri, Pall. Spic. 8, p. 8, tome 2, fig. 1.

Periophthalmus Koelreuteri, Bl. Schn., p. 65.

Gunther describes five varieties of this species, reducing to synonyms several species of Cuv. and Val., Cantor, Richardson, and others. The specimens in the "Chevert" collection were taken near the mouth of the Katow River, where they seemed to be very numerous.

78.—ELEOTRIS LINEATA.

Castelnan, Researches on the Fishes of Australia, p. 24.

Found at Darnley Island.

79.—ELEOTRIS ELONGATA.

Plate XIII., fig. 1.

D. $7\frac{1}{3}$, A. $\frac{1}{3}$.

Height of body, one-tenth of the length. Head broad and flat between the eyes. Mouth oblique, the maxillary extending to the vertical from the anterior third of the eye. Scales minute.

Tail pointed. Colour, pale reddish yellow, with a narrow black axillary spot.

This species was also taken at Darnley Island.

FAMILY BATRACHIDÆ.

80.—BATRACHUS DIEMENSIS.

Batrachoides Diemensis, Lesueur, Journ. Acad. Nat. Sc. Phil. 3, 1823, p. 402.

Batrachus quadrispinis, Cuv. and Val. 12, p. 487.

„ *Diemensis*, Richards, Ann. Nat. Hist. 10, p. 352 ;
Voy. Ereb. and Terr., Fishes, p. 17, pl. 8, fig. 1-2 ; Bleek, Tim.,
p. 168.

Taken at Cape Grenville, and generally throughout Torres Straits.

81.—BATRACHUS DUSSUMIERI.

Cuv. and Val. 12, p. 474, pl. 367.

One specimen, which we believe may be this species, was taken at Darnley Island, but it does not much resemble the figure given in Cuvier and Valenciennes's plates.

82.—BATRACHUS DUBIUS.

White, Voy. New South Wales, p. 265 ; Richards, Voy. Ereb. and Terr., Fishes, p. 16, pl. 10.

One specimen from Sue Island, Torres Straits.

FAMILY PEDICULATI.

83.—ANTENNARIUS UROPTHALMUS.

Chironectes caudimaculatus, Richards, Voy. Ereb. and Terr., Fishes, p. 125, pl. 60, fig. 8, 9.

Antennarius urophthalmus, Bleek, Natuurk. Tydschr. Mdell. Ind. 2, p. 488 and 15, p. 237.

One specimen, Darnley Island.

FAMILY BLENNIIDÆ.

84.—SALARIAS LINEOLATUS.

*Plate XIII., fig. 2.*D. 31, A. $\frac{2}{1}$.

The height of the body is one-fourth of the length. The head is vertical in front, with a long bifid tentacle above the orbit, a shorter one on the anterior nostril, and a short broad-fringed one on each side of the occiput. The mouth is rather large. There are no canine teeth. The dorsal fin is high, without notch, and almost continuous with the caudal. The colour is a yellowish brown, much spotted on the head and dorsal fin, and with a number of interrupted fine longitudinal blue lines on the body.

Found at Darnley Island.

85.—SALARIAS FASCIATUS.

Blennius gattorugine, Forsk. Descr. Anim., p. 23.

„ *fasciatus*, Cuv. and Val. 11, p. 324.

„ taf. 162, fig. 1. Bl. Schu., p. 168.

Salarias quadripinnis, Rupp. Atl. Fische., p. 112, taf. 28, fig.

2. Cuv. and Val., 11 p. 318. Bleek. Verh. Bat. Gen. 22, p. 19.

Salarias fasciatus, Cuv. and Val. 11, p. 324.

„ *priemensis*, Bleek, Sumatra, 2 p. 268.

From Cape Grenville.

86.—SALARIAS BISERIATUS.

Cuv. and Val. 11, p. 316. Kner. Fische. Novara, p. 197, pl. 8, fig. 5.

This species is not in Gunther's catalogue. A few specimens were taken at Nepean Island in Torres Straits.

87.—SALARIAS GEMINATUS.

*Plate XIII., fig. 3.*D. $\frac{12}{3}$ A. $\frac{2}{2}$

The height of the body is one-seventh of the total length. The head is vertical in front, with a rounded crest on the occiput. The

eyes are near one another, and have a fringed tentacle on the summit of the orbit. No canine teeth. Dorsal fin deeply notched, and continuous with the caudal; the latter is pointed. The colour is yellow, with seven or eight faint blue or black bands disposed in pairs across the body, and a distinct black edge to the dorsal, anal, and caudal fins.

This is a remarkably elongate form of *Bleennidæ*. It is from some part of Torres Straits.

88.—*SALARIAS IRRORATUS*.

Plate XIII., fig. 4.

D. $\frac{42}{18}$ A. 18.

The height of the body is one-fifth of the total length. The profile of the head is rounded, the forehead and eyes being in advance of the mouth. The eyes are about one-third of the diameter of the orbit apart. There is a short simple tentacle above each eye, and a very low continuous crest on the top of the head, extending to the dorsal fin. No canine teeth. The dorsal fin is slightly notched, commences at the occiput, and is not continuous with the caudal. The rays of the anal fin are longer than those of the dorsal, and terminate in filaments. The colour is pale reddish brown, thickly sprinkled with small white spots. The fins are nearly white—the anal tipped with black, the caudal spotted, the pectorals with basal white spots.

One specimen was found at Low Island.

89.—*SALARIAS FILAMENTOSUS*.

Plate XIV., fig. 1.

D. $\frac{12}{20}$ A. $\frac{2}{90}$

Height of body, one-third of the length. Head rounded, sloping above, nearly vertical in front, with a deep groove on the occiput. No canine teeth. Tentacles above each eye and on every nostril. Dorsal fin moderately notched; the spines elongate, and terminating in filaments; the rays near the extremity longest.

The two anal spines are terminated each by a broad tentacular appendage—the anal rays are shorter than those of the dorsal. Tail somewhat rounded. Colour entirely black.

There is much that is anomalous and unlike a *Salarias* in this fish, but yet there seems to be no valid reason for removing it from that genus. It was captured at Cape York.

90.—*SALARIAS AURIDENS*.

Plate XIV., fig. 2.

D. $\frac{13}{21}$ A. $\frac{2}{21}$

Height of body, one-fifth of the length. Head horizontal above, vertical in front. A long tentacle, divided at the point, over each eye. Teeth very minute, and of a golden lustre. No canines. Dorsal fin deeply notched. Colour brown. Fins yellow—the dorsal, pectorals, and caudal, spotted with brown.

One specimen from Darnley Island.

91.—*SALARIAS CRISTICEPS*.

Plate XIV., fig. 3.

D. $\frac{13}{21}$ A. $\frac{2}{22}$

Height of body, one-sixth of the length. Profile of head vertical, the forehead rather more prominent than the mouth. A low crest on the top of the head. A large erect tentacle on the summit of each orbit, and a small tentacle on each anterior nostril. Dorsal fin deeper than the anal, and notched almost to the back. Colour of the body, almost black; of the fins, diaphanous black. Tail broadly rounded.

This species also comes from Darnley Island.

FAMILY TEUTHIDIDÆ.

92.—*TEUTHIS ALBOPUNCTATA*.

Amphacanthus albopunctatus, Schleg. Faun. Japan. Poiss. p. 128.

Amphacanthus margaritiferus, Rich. Ichth. Chin., p. 243.

Amphacanthus fuscescens, Rich. Ichth. Chin., p. 243.

„ *dorsalis*, Bleek. Verh. Batav. Genootsch. 23.
Teuth. p. 9, and Java 4, p. 332.

Teuthis brevirostris, Gronov. Syst. Gray, p. 142.

The specimens obtained of this fish were speared by the natives on the reefs at Cape Grenville.

93.—TEUTHIS VERMICULATA.

Amphacanthus vermiculatus, Cuv. and Val. 10, p. 126. Müll. and Schleg. Verh. Overz. Bez. Vissch., p. 11, pl. 3, fig. 2. Bleek. Verh. Batav. Genootsch. 23, Teuth. p. 11.

Taken in Trinity Bay.

94.—TEUTHIS NOTOSTICTA.

Amphacanthus notostictus, Rich. Ann. and Mag. Nat. Hist., 1843, 11, p. 172.

One specimen, Darnley Island.

95.—TEUTHIS DOLIATA.

Siganus doliatus, Cuv. Regne, Anim. Guerin. Iconog. Poiss., pl. 35, fig. 1.

Amphacanthus doliatus, Cuv. and Val. 10, p. 132. Cuv. Regne, Anim. Ill. Poiss., pl 71, fig. 1. Bleek. Ternate, 2, p. 606.

One specimen, Fair Cape.

FAMILY ACRONURIDÆ.

96.—NASEUS UNICORNIS.

Monoceros piscis, Willughby, 150, t. 0-4.

„ *minor*, Willughby, p. 216.

Chaetodon, sp., Hapelg. Iter Palaest., p. 332, No. 71.

„ *unicornis*, Forsk., p. 63, and Icon. t. 23. L. Gm. 1, p. 1268.

Monocerus Raii, Bl. Schn., p. 181.

„ *biaculeatus*, Bl. Schn., p. 180, t. 42.

Naso fronticornis, Lacep. 3, pp. 105-106, pl. 7, fig. 2.

Acanthurus unicornis, Shaw Zool. 4, p. 374, pl. 50.

Aspirurus unicornis, Rüpp. Atl. Fische., p. 60.

Naseus fronticornis, Cuv. and Val. 10, p. 259. Faun. Japon. Poiss., p. 129, pl. 69. Richards Ichth. Chin., p. 244. Bleek. Batav. 3, p. 238. Cuv. Regne. Anim, Ill. Poiss., pl. 72, fig. 2.

Naseus longicornis, Cuv. in Guer. Iconogr. Poiss., pl., 35, fig. 3.

Harpurus monoceros, Forst. Descr. Anim., ed. Licht., p. 219.

Acronurus Ægyptius, Gronov. Syst., ed. Gray, p. 191.

„ *corniger*, Gronov. Syst., ed. Gray, p. 192.

One fine specimen, nearly two feet long, was taken at Bramble Cay.

97.—*NASEUS ANNULATUS*.

Priodon annulatus, Quoy and Gaim. Voy. Uran. Zool., p. 377. (young.)

Naseus marginatus, Cuv. and Val. 10, p. 280, adult.

Priodon annularis, Cuv. and Val. 10, p. 302, pl. 294 (young.)
Bleek. Amboyna 2, p. 558.

Naseus annulatus, Bleek. Celeb. 8, p. 304.

An adult specimen, ten inches long, and without any trace of a ring on the tail, was caught at Cape Grenville.

FAMILY ATHERINIDÆ.

98.—*ATHERINA LACUNOSA*.

Atherina Waigiensis (part) Quoy and Gaim. Voy. Uran. Zool. p. 334.

Atherina lacunosa, Bleek, Sumatra, p. 504 (probably not Forst. or Val.)

The exact locality in which this fish was found has not been noted, but it was most probably at Cape York.

99.—*ATHERINA PINGUIS*.

Lacep. 5, p. 372, pl. 11, fig. 1. Bleek. Act. Soc. Indo-Nederl. 8, Sumatra 8, p. 24.

Atherina affinis, Beun. Proc. Comm. Zool. Soc. 1, 1831, p. 166.

Atherina pectoralis, Cuv. and Val. 10, p. 447.

Found abundantly at Hall Sound. It may prove to be a new species.

FAMILY MUGILIDÆ.

100.—MUGIL AXILLARIS.

? *Mugil axillaris*, Cuv. and Val. 11, p. 131.

Mugil axillaris, Bleek. *Natursk. Tijdschr. Nederl. Ind.* 4, 1853, p. 266, and *Act. Soc. Indo-Nederl.* 8, Sumatra. 9, p. 3.

Mugil parsia, Bleek. *Natursk. Tijdschr. Nederl. Ind.* 3, 1852, p. 166.

This species was frequently taken in the seine at Yule Island, Hall Sound.

101.—MUGIL DELICATUS.

Plute XV., fig. 1.

D $4\frac{1}{8}$ A $\frac{2}{8}$ L. lat. 37.

Height of the body at its deepest part behind the first dorsal fin, four and a half times in the length. The length of the head is five and a half in the same. Head broad, flat above, the width of the interorbital space being more than half the length of the head. Snout short and obtuse. The free space at the chin between the mandibles is narrowly lanceolate. Eye without an adipose membrane. There are twenty-one series of scales between the snout and the spinous dorsal. The pectorals extend beyond the origin of the dorsal, but scarcely to the extremity of the ventrals. The soft dorsal and anal are scaly and falcate, the latter slightly the longest. The caudal fin is strongly forked, with the upper lobe the longest, and is slightly tipped with black. The general colouration is bright silvery, slightly darker on the back, and with a black spot and elongate scale on the upper part of the axil.

This species was very abundant about Cape York.

Of the many species of *Mugil* with which Australia abounds, all of high reputation as edible fishes, this is decidedly the best.

Another large scaled and very excellent *Mugil* was taken frequently by the seine in the same place, but unfortunately those which were kept for specimens were so injured in the rough passage across the Gulf of Papua as to become completely useless.

ORDER II.

ACANTHOPTERYGII PHARYNGOGNATHI.

FAMILY POMACENTRIDÆ.

102.—AMPHIPRION PERCULA.

Tetragonopterus, No. 5, Klein. Pisc. Miss. 4, p. 38, t. 11, fig. 8. Seba. 3, p. 62, t. 26, fig. 20.

Perca, sp., Tyson in Philos. Trans. 56, p. 247, t. 7, fig. 8.

Anthias polymna, var. Bl. t. 316, fig. 3.

Lutjanus polymnus, var. Lacep. 4, p. 224.

„ *percula*, Lacep. 4, pp. 239-248.

Amphiprion percula, Cuv. and Val. 5, p. 397. Bleek. Amb. and Cer. p. 287. Schleg. Overz. Amph. and in Verh. Nat. Gesch. Nederl. Overz. Bezitt. p. 19. Steindachner. Verh. Zool. Bot. Gisellsch. Wien., 1861, p. 78.

Amphiprion tunicatus, Cuv. and Val. 5, p. 399, pl. 132, fig. 2. Less. Voy. Coq. Zool. Poiss. p. 192, pl. 25, fig. 3.

Amphiprion ocellaris, Cuv. and Val. 5, p. 399.

„ *melanurus*, Cuv. and Val. 5, p. 400.

Found at Darnley Island.

103.—POMACENTRUS LITTORALIS.

Pomacentrus littoralis, Cuv. and Val., 5, p. 425; Schleg. Overz. Amphipr., &c., in Verh. and Nat. Gesch.; Nederl. Overz. Bezitt, p. 20, tab. 4, fig. 3; Bleek. Batav., p. 483.

„ *pristiger*, Cuv. and Val. 9, p. 506.

„ *hogoluensis*, Hombr. and Jacq. Voy. Pole Sud Poiss., p. 47, pl. 5, fig. 3.

? *Pristotis fuscus*, Bleek. Verh. Batav.; Genootsch 22, Bali, p. 9.

A pretty generally distributed species. Specimens were obtained at Cape Grenville and the Palm Islands.

104.—POMACENTRUS CHRYSURUS.

Chatodon chrysurus, Broussonet.

Pomacentrus chrysurus, Cuv. and Val. 5, p. 423.

Common at Darnley Island.

105.—POMACENTRUS OBSCURUS.

Plate XV., fig. 2.

D. $\frac{13}{3}$, A. $\frac{2}{13}$. L. lat. 26.

Height of body twice and three-fourths in the total length. Præoperculum and infra orbital strongly denticulated. The dorsal fin increases gradually in height posteriorly. Caudal emarginate. Colouration greenish brown, with the ventral and anal fins black, and a black spot margined anteriorly with white above the root of the tail.

This species has some resemblance to *P. littoralis*. The exact locality of its capture has not been recorded.

106.—GLYPHIDODON BANKIERI.

Glyphisodon Bankieri, Rich. Ichth. Chin., p. 253.

„ *nemurus*, Bleeker, Borneo 2, p. 73.

Found at Cape Grenville.

New Genus, HEPTADECANTHUS.

Body high, compressed. Præoperculum and infraorbital finely serrated. Teeth conical, in a single series, with minute teeth between. Dorsal fin with seventeen spines, anal with two. Scales moderate. The lateral line extends to the commencement of the soft dorsal. Gills, three-and-a-half. Pseudobranchiæ.

107.—HEPTADECANTHUS LONGICAUDIS.

Plate XV., fig. 3.

D. $\frac{17}{3}$, A. $\frac{2}{13}$.

Height of body more than half the length without the tail. Snout shorter than the diameter of the eye. Mouth small and oblique. Forehead convex between the eyes, and about equal in

width to the orbit. The soft dorsal and anal fins pointed behind; the caudal long and deeply forked; the pectorals long, reaching almost to the anal. Colouration dark brown (probably violet in fresh specimens) as far as a line from the commencement of the soft dorsal to the anal spines, behind that grey. The soft dorsal, anal, pectoral, and caudal fins are more or less spotted with brown.

Several specimens were captured at Cape Grenville.

FAMILY LABRIDÆ.

108.—CHAEROPS CYANODON.

Labrus cyanodus, Richards. Ann. and Mag. Nat. Hist., 1843, 11, p. 355.

Lachnolaimus cyanodus, Richards. Voy. Ereb. and Terr. Fishes, p. 131, pl. 55, fig. 5.

Cape Grenville, speared by the natives on the reefs.

109.—CHAEROPS CEPHALOTES.

Castelnau, Researches on the Fishes of Australia, p. 39.

Also speared at Cape Grenville.

110.—CHAEROPS NOTATUS.

Plate XVI., fig. 1.

Teeth green; no posterior canine tooth. Præoperculum very minutely serrated. Head as high as long. Præorbital very high. Scales on the cheek small, numerous, and slightly imbricate. L. lat. 29. Colouration greenish yellow, with a pale blue or pearly centre to each scale; a blue band from the muzzle through the upper part of the eye to the summit of the operculum, another beneath the eye to the operculum below the first, a third much curved from the angle of the mouth to the operculum at the base of the pectoral fin, and a fourth along the edge of the operculum. There is a large black spot on the back at the base of the last two dorsal spines, and three blue lines on the anal fin.

This species seems to resemble *C. ommopterus* in some respects; but it cannot be the same, unless the description given of that fish in Gunther's Catalogue is very far from correct.

Speared by the natives at Cape Grenville.

111.—STETHOJULIS STRIGIVENTER.

Julis strigiventer, Benn. Proc. Zool. Soc., 1832, p. 184; Cuv. and Val. 13, p. 468; Bleek. Banda 1, p. 251.

Stethojulis strigiventer, Gunth. Ann. and Mag. Nat. Hist., 1861, 8, p. 386; Bleek. Atl. Ichth., p. 135, tab. 43, fig. 1.

One specimen was taken at Low Island. It is without a posterior canine tooth.

New genus, CHEILOLABRUS.

Body oblong, compressed. Head compressed, obtuse, and moderately elevated, with numerous non-imbricated scales on the cheek. Two strong prominent canine teeth in each jaw in front, the upper pair longest, with a series of short strong obtuse molar-like teeth on each jaw behind. Præoperculum entire. Mouth very protractile. Lips thick and fleshy, the under one forming two large reflected flaps. Scales rather large, smaller on the thorax. Lateral line dislocated but continuous. Dorsal spines eight. Gills three and a half.

112.—CHEILOLABRUS MAGNILABRIS.

Plate XVI., fig. 2.

D. $\frac{8}{10}$, A. $\frac{2}{10}$, L. lat. 28.

Height of body one-third of the length. Head nearly the same. Distance between the eyes nearly double the diameter of the orbit. Tail subtruncate. All the upper part of the body is of dark brown, the breast orange, and the scales towards the tail have each a blue spot. The head in front is marked by a number of blue streaks, and there is a large blue patch behind the eye. The soft dorsal and anal fins have numerous oblique blue streaks. The lateral line descends perpendicularly on two scales opposite the posterior third of the soft dorsal, and terminates on the tail at the third scale from the last.

This fish was obtained from the natives at Darnley Island.

113.—PSEUDOSCARUS RIVULATUS.

Scarus fasciatus, Cuv. and Val. 14, p. 222.

„ *rivulatus*, Cuv. and Val. 14, p. 223.

Scarus rivulatoides, Bleek. Verhand. Batav. Gen. 22, Labr. Cyll., p. 55.

„ *micrognathius*, Bleek. l. c., p. 56.

Pseudocarus rivulatus, Bleek. Atl. Ichth., p. 44, tab. 9, fig. 3.

Got from the natives at Cape Grenville.

114.—PSEUDOSCARUS FLAVOLINEATUS.

Plate XVI., fig. 3.

Two series of scales on the cheek—the lower with six scales, and two scales on the præopercular limb. Upper lip nearly covering the jaw, which is white. Two horizontal conical teeth on the back part of the upper jaw, and one on the lower. Thirteen pectoral rays. Dorsal spines equal. Colouration, greenish olive toward the back; greenish yellow below, with many undulating longitudinal yellow streaks about the mouth and forehead. The soft dorsal is spotted with yellow at the base, and has a long ovate brown-edged spot between each ray. Both it and the anal fin have a submarginal dark streak with a pale margin.

Procured from the aborigines at Cape Grenville. With one or two exceptions all the Labridæ of the expedition were got in the same way.

115.—PSEUDOSCARUS NUDIROSTRIS.

Plate XVII., fig. 1.

More elongate than the preceding species. Two series of scales on the cheek, and two scales on the præopercular limb. Jaws, whitish, almost entirely uncovered by the lips. No lateral horizontal teeth. Fourteen pectoral rays. Dorsal spines equal. Caudal fin subtruncate, a little lobed at the upper angle. Colouration, olive above, golden yellow below, with a submarginal dark streak on the soft dorsal and anal fins, and a large brown spot on the upper and lower terminal scale on the tail.

Hab. Cape Grenville.

ORDER III.

ANACANTHINI.

FAMILY OPHIDIIDÆ.

116.—FIERASFER HOMEI.

Oxybeles Homei, Richards. Voy. Ereb. and Terr., Fishes, p. 74, pl. 44, figs. 7-18.

„ *brandesii*, Bleek, Verh. Batav. Genootsch 24, Chiroe., &c., p. 24, Natuurk. Tydschr. Nederl. Ind. 1, p. 276, figs. 1-3-7, pp. 162-495.

Two specimens of this fish were vomited by a *Holothuria* dredged in Trinity Bay. The species was first described by Richardson, from a specimen presented by Sir Edward Home to the College of Surgeons, which had been got in the same way from a *Holothuria*, dredged up at Timor. Gunther's Catalogue mentions eight other species of this remarkable genus, and it would appear from what is known of their habits that they all obtain their living within the body of Echinodermata, though it is still a matter of doubt whether they occupy the respiratory or digestive cavities of their hosts.

FAMILY PLEURONECTIDÆ.

117.—PARDACHIRUS PAVONINUS.

Achirus pavoninus, Lacep. 4, pp. 658-661. Cant. Cat., p. 225. Bleek. Verh. and Batav. Gen. 24, Pleuron., p. 18.

Pleuronectes pavoninus, Shaw. Zool. 4, p. 310.

Found at Cape Grenville and at Cape York.

ORDER IV.

PHYSOSTOMI.

FAMILY SILURIDÆ.

118.—CNIDOGLANIS LEPTURUS.

Gunth. Cat. Fishes, Brit. Mus., vol. 5, p. 28.

Locality of capture not noted.

119.—ARIUS THALASSINUS.

Deddi jella, Russ. Fish. Ceram., pl. 169.

Bagrus thalassinus, Rüpp. N.W. Fische, p. 75, tab. 20, fig. 2.

„ *bilineatus*, Cuv. and Val. 14, p. 434.

„ *netuma*, Cuv. and Val. 14, p. 438, pl. 417.

? *Bagrus laevigatus*, Cuv. and Val. 14, p. 439.

Arius nasutus, Cuv. and Val. 15, p. 60; Bleek Verh. Bat. Gen. 21 Silur., p. 31.

Bagrus rhodonotus, Bleek. l.c., p. 29.

„ *carchariorhynchus*, Bleek l.c., p. 30.

Netuma nasuta, Bleek. Prodr. Silur., p. 95; and Atl. Ichth. Silur., tab. 61.

„ *thalassina*, Bleek Atl. Ichth. Silur., p. 28.

This fish was found almost everywhere in Torres Straits and New Guinea. Those caught off Katow were two feet long.

FAMILY SCOPELIDÆ.

120.—SAURIDA TUMBIL.

Rooner, Valent., fig. 131; Renard 1, fig. 149.

Lacertus peregrinus, Rondel. de Pisc 15, cap. 9, p. 428.

Badi mottah, Russell, tab. 172.

Salmo tumbil, Bloch. 9, p. 112, tab. 430; Bl. Schn., p. 405.

Saurus badimottah, Cuv. Regne. Anim.; Rüppell, Neue Wirbelth. Fische, p. 77; Cant. Mal. Fish., p. 270.

Saurida tumbil, Cuv. and Val. 22, p. 500; Bleek Verh. Batav. Gen. 24, Chir., p. 20.

One specimen; locality of capture unknown.

121.—SAURIDA GRANDISQUAMIS.

Gunth. Cat. Fish. Brit. Mus., vol. 5, p. 400.

Taken at Cape Grenville.

FAMILY SCOMBRESOCIDÆ.

122.—BELONE MELANOTUS.

Belone melanotus, Bleek. Natuurk. Tydschr. Nederl. Ind. 1, p. 94; or Verh. Gen. 24, Sneek. Cisseh., p. 14.

Mastacembelus crocodilus, Bleek. Nederl. Tydschr. Dierk. 3 (not syn.)

Taken at Cape York.

123.—*BELONE ANNULATA*.

Russell, pl. 175.

? *Belone medica*, Lessueur Journ. Acad. Nat. Sc. Philad. 2, 1821, p. 131.

Belone annulata, Cuv. and Val. 18, p. 447, pl. 550; Cant. Mal. Fish., p. 244; Day. Fish. Malab., p. 165.

„ *gigantea*, Schleg. Faun. Japon. Poiss., p. 245; Bleek. Act. Soc. Sc. Indo-Nederl. 3, Japan, p. 21.

? „ *melanurus*, Bleek. Verh. Batav. Gen. 22 Madur., p. 11.

? „ *cylindrica*, Bleek. Verh. Bat. Gen. 24 Snoek., p. 13.

? „ *brachyrhynchus*, Bleek. Nat. Tydschr. Ned. Ind. 6, p. 61 (young).

Mastacembelus choram., Bleek. Nederl. Tydschr. Dierk. 3 (young).

Found at the Percy Islands and Cape York, over three feet long.

124.—*HEMIRAMPHUS MARGINATUS*.

Esox marginatus, Forsk. Descr. Anim., p. 67; Rüpp. N.W. Fische, p. 73.

? *Hemiramphus brevirostris*, Cuv. Regne. Anim.; Bleek. Verh. Batav. Gen. 24 Snoek., p. 17.

„ *lutkei*, Cuv. and Val. 19, p. 49.

„ *marginatus*, Bleek. Ned. Tydschr. Dierk. 3, p. 148.

Taken at the Palm Islands.

125.—*HEMIRAMPHUS COMMERSONII*.

Valent., fig. 318; Renard. 2, tab. 5, fig. 2.

Acus sp., Will. Hist. Pisc., tab. p., fig. 3.

Far, Forsk. Descr. Anim., p. 67.

Esox espadon, var. Lacep. 5, pl. 7, fig. 3.

Hemiramphus Commersonii, Cuv. Regue. Anim.; Cuv. and Val. 19, p. 28; Bleek. Verh. Batav. Gen. 24 Snoek., p. 17.

„ *far*, Rüpp. N.W. Fische, p. 74.

This fish was abundant about Cape York, and was found in greater or less number wherever the seine was hauled. It is a large and handsome species, but very inferior as an article of diet to the common Sydney gar fish.

126.—HEMIRAMPHUS QUOYI.

Cuv. and Val. 19, p. 26; Bleek. Nat. Tydschr. Nederl. Ind. 2, p. 491; Cop. in Verh. Bat. Gen. 24 Snoek., p. 26; and Ned. Tydschr. Dierk. 3, p. 153.

This species was only found at Hall Sound, New Guinea.

127.—EXOCELUS NIGRIPINNIS.

Cuv. and Val. 19, p. 108; Cant. Mal. Fish., p. 250; Bleek. Act. Soc. Sc. Indo-Nederl. 2, Amboina 8, p. 86; and Ned. Tydschr. Dierk. 3, p. 120.

The only specimens taken of this flying fish are from the Warrior Reef, but it was seen almost everywhere.

FAMILY CLUPEIDÆ.

128.—CLUPEA TEMBANG.

Spratella fimbriata, Bleek. Verh. Bat. Gen. 24 Haring, p. 27 (not Cuv. and Val.)

Clupea gibbosa, Bleek. Journ. Ind. Archip., 1849, Celebes.

Spratella tembang, Bleek. Verh. Bat. Gen. 24 Haring, p. 28; or Nat. Tydschr. Ned. Ind. 3, p. 774.

Three specimens of this pretty little herring were vomited by a booby at Bramble Cay. They are under six inches in length, and are probably immature.

129.—SPRATELLOIDES DELICATULUS.

Clupea delicatula, Benn. Proc. Comm. Zool. Soc. 1, p. 168.

„ *macassarimensis*, Bleek. Journ. Ind. Archip., 1849, p. 72.

Clupeoides macassariensis, Bleek. Verh. Bat. Gen. 24 Haring, p. 17; or Nat. Tydschr. Ned. Ind. 3, p. 772.

This fish was seen in enormous shoals at Darnley Island during the fortnight which the Chevert lay there. At that time—the early part of August, 1875—the whole northern shore of the Island was literally black with them, and there would have been no difficulty, with proper appliances, in preserving hundreds of tons of these finest of all sardines.

FAMILY CHIROCENTRIDÆ.

130.—CHIROCENTRUS DORAB.

Clupea dorab, Forsk. Dascr. An. p. 72, Lacep. 5, p. 425, Russell. 2, pl. 199.

„ *dentex*, Bl. Schn., p. 428.

Esox chirocentrus, Lacep. 5, p. 296.

Chirocentrus dorab, Cuv. Regne. Anim. Rüpp. N. W. Fische, p. 18. Richards. Ichth. Chin., p. 311. Cuv. and Val. 19, p. 150, pl. 565. Bleek. Verh. Bat. Gen. 22, Madura, p. 6. Cant. Mal. Fish., p. 277. Day. Fish. Malabar, p. 233.

„ *hypselosoma*, Bleek. Verh. Bat. Gen. 24, Chiroc, p. 25, or Nat. Tydschr. Ned. Ind. 3, p. 71.

One specimen, three feet long, was taken in the seine at Cape York.

FAMILY MURÆNIDÆ.

131.—CONGER MARGINATUS.

? *Muræna tota cinerea*, Forsk. p. 22, No. 9.

? *Conger cinereus*, Rüpp. Atl. Fische, p. 115, pl. 24, fig. 1.

Conger marginatus, Valenc. in Voy. Bon. Poiss, p. 201, pl. 9, fig. 1.

„ *altipinnis*, Kaup. in Wieg. Arch. 22, p. 72, or Apod, p. 114. Gunth. in Fish. Zang., p. 125.

„ *noordzicki*, Bleek. Act. Soc. Sc. Ind. Nederl. 2, Amboyna, 8, p. 86, or Atl. Ichth. Mur., p. 26, pl. 23, fig. 2.

One specimen from Low Island Reef.

132.—MURÆNA UNDULATA.

Murænophis undulata, Lacep. 5, pp. 629-644.

Muræna cancellata, Richards. Voy. Ereb. and Terr. Fish., p. 87, pl. 46, figs. 1-5. Bleek. Verh. Bat. Gen. 25, Mur. p. 74, or Nat. Tydschr. Ned. Ind. 5, p. 531, and 8, p. 326.

„ *Valenciennii*, Eyd. and Soul. Voy. Bonite. Poiss, p. 207, pl. 8, fig. 1.

„ *Agassizi*, Bleek, Nat. Tydschr. Ned. Ind. 8, p. 458.

Thyrsoidea cancellata, Kaup. Apod., p. 76, fig. 59.

Gymnothorax cancellatus, Bleek. Atl. Ichth. Mur., p. 93, tab. 32, fig. 3; tab. 33, fig. 2; tab. 30, fig. 1. Kner. Novara. Fische., p. 384.

„ *Agassizi*, Bleek. l. c., p. 95, tab. 41, fig. 2.

Muræna nubila, Gunth. Fish. Zanz., p. 127.

Found on the reef, Low Island.

133.—MURÆNA NEBULOSA.

Seba. 2, tab. 69, figs. 1, 17.

Muræna nebulosa, Ahl. De Mur. et Opeiht., p. 5, tab. 1, fig. 2.

Gymnothorax nebulosus, Bl. Schn., p. 528.

„ *echidna*, Bl. Schn., p. 526.

Echidna variegata, Forst. desc. An. ed. Licht., p. 181. Bleek. Atl. Ichth. Mur., p. 80, tab. 24, fig. 2.

Muræna ophis, Rüpp. Atl. Fische., p. 116, tab. 29, fig. 2. Rich. Voy. Ereb. and Terr. Fish., p. 93.

Tharodontis ophis, McClell. late Journ. Nat. Hist. 5, p. 217.

Muræna variegata, Richards. Voy. Ereb. and Terr. Fish., p. 94, pl. 47, figs. 11-16. Bleek. Nat. Tydschr. Ned. Ind. 3, p. 295, or Verh. Bat. Gen. 25, Mur., p. 47. Peters. Wieg. Arch. 1855, p. 270.

Paecilophis variegata, Kaup. Apod., p. 98, tab. 13, fig. 67. Kner. Novara, Fisch. p. 381.

Found on all reefs.

134.—MURÆNA PSEUDOTHYRSOIDEA.

Muræna pseudothyrsoidea, Bleek. Nat. Tydschr. Ned. Ind. 3, p. 778, or Verh. Bat. Gen. 25, Mur., p. 44.

Gymnothorax pseudothyrsoides, Bleek. Atl. Ichth. Mur., p. 104, pl. 46, fig. 2.

Found on the reefs at Darnley Island.

135.—MURÆNA FIMBRIATA.

Muræna fimbriata, Benn. Proc. Comm. Zool. Soc. 1, 1831, p. 168.

Muræna bullata, Richards. Voy. Ereb. and Terr. Fish., p. 86; Kaup. Apod., p. 81, fig. 60.

„ *isingleena*, Bleek. Nat. Tydschr. Ned. Ind. 9, p. 277 (not Richardson).

„ *isingleenoides*, Bleek. Verh. Bat. Gen. 25, Mur. p. 48.

Gymnothorax isingleenoides, Bleek. Atl. Ichth. Mur. p. 91, pl. 35, fig. 1, pl. 36, fig. 1. (Colouration of anal fin incorrect).

On reefs in Torres Straits.

136.—MURÆNA MELANOSPILA.

Muræna melanospilos, Bleek. Nat. Tydschr. Ned. Ind. 9, p. 279.

Gymnothorax melanospilos, Bleek. Atl. Ichth. Mur., p. 90, pl. 42, fig. 1.

Found at Darnley Island.

ORDER V.

LOPHOBRANCHII.

FAMILY SYGNATHIDÆ.

137.—ICHTHYOCAMPUS MACULATUS.

Plate XVII., fig. 2.

D. 25. Osseus rings 20 x 57.

Very elongate. Operculum without ridge. Snout more than half the length of the head. A prominence on the occiput. Body rather deeper than broad, with the ridges well defined. Tail twice as long as the trunk, or nearly so. Dorsal fin standing on six rings, three of which belong to the body. Caudal fin very minute. Colouration in spirits brownish, with a yellow spot on each ring of the body below the lateral line.

One specimen was got at Darnley Island. Its length is eleven inches, and its depth at the deepest part scarcely over two lines.

138.—GASTROTOKEUS BIACULEATUS.

Valent. Amb. 3, p. 500, No. 481 ; Renard, fig. 73.

Sygnathus biaculeatus, Bl. Ausl. Fisch. 4, p. 10, tab. 121, figs. 1 and 2 ; Bl. Schn., pl. 515, tab. 107 ; Cant. Mal. Fish, p. 387.

„ *tetragonus*, L Gm. 1, p. 1453 ; Lacep. 2, p. 42.

Sygnathoides Blochii, Bleek. Nat. Tydschr. Ned. Ind. 2, p. 259.

Solegnathus Blochii, Bleek. Verh. Bat. Gen. 25, Trosk., p. 24.

Gasterotokeus biaculeatus, Kaup. Soph. p. 19.

A number of this curious fish were taken in the seine in Hall Sound, New Guinea.

139.—HIPPOCAMPUS NOVÆ HOLLANDIÆ.

Steindachner, Sitzgber. Ak. Wiss. Wien, 1866, 53, p. 471, taf. 1, fig. 2.

One specimen. Place of capture not indicated.

ORDER VI.

PLECTOGNATHI.

FAMILY SCLERODERMI.

140.—TRIACANTHUS BIACULEATUS.

Balistes biaculeatus, Bl., tab. 148, fig. 2.

Triacanthus biaculeatus, Cuv. Regn. Anim.; Cant. Mal. Fish., p. 360 ; ? Day Fish. Malabar, p. 260.

„ *oxycephalus*, Bleek. Verh. Bat. Gen. 24, Balist. p. 27, tab. 5, fig. 10 ; or Nat. Tydschr. Ned. Ind. 2, p. 496 ; or, Atl. Ichth. 5. p. 80. Balist. pl. 6, fig. 3.

„ *Blochii*, Bleek. Nat. Tydschr. Ned. Ind. 3, p. 81 ; or Atl. Ichth. 5, p. 89, Balist. pl. 3, fig. 1 ; Kner. Novara, Fische, p. 394.

„ *angustifrons*, Hollard, Ann. Sc. Nat., 1854, 1, p. 45, pl. 2, fig. 2.

„ *macrurus*, Bleek. Atl. Ichth. 5, p. 91, Balist. pl. 8, fig. 3.

Abundant about Cape York.

141.—MONACANTHUS CHEVERTI.

*Plate XVII., fig. 3.*D. $1\frac{1}{2}$ -24, A. 21.

Dorsal spine rough, but without barbs. Ventral spine present and moveable. Scales not very small. On each side, on, and in advance of the tail are two and a half series of black-rooted and recurved spines. Height of body, one-half of the length without the caudal fin. Distance from snout to eye, one-third of the total length. Dorsal spine taking its rise close behind the vertical from the pectoral, which is perpendicular to the hinder margin of the eye, and has fourteen rays. Dorsal and anal fins sub-elevated and equal. Caudal fin rounded, the tail being constricted above and below. Colouration yellowish, with an anal spot, a large patch above the median lateral line with two oblique bands extending to the dorsal fin, the dorsal spine, a band between the eyes extending on each side to the root of the pectorals, and four or five oblique parallel streaks of different thicknesses from the supra-median patch to the anal fin, black. There are also three narrow blue streaks from the eye to the base of the pectorals, and one surrounding the upper part of the mouth.

It is rather curious that this very peculiarly marked species of *Monacanthus* has an almost counterpart in the closely allied genus *Balistes*. *B. Aculeatus* has not only the markings very similar, but the number of rays in the dorsal and anal fins closely correspond. On the other hand, the present species, though undoubtedly a *Monacanthus* as far as generic characters are concerned, presents no resemblance to any other known species of the genus. Can it be that the characters on which the genera have been founded are not of such importance as Ichthyologists seem to imagine.

142.—OSTRACION CUBICUS.

Ostracion prior, Aldrov. 4, c. 19, p. 560; Johnston, p. 125, tab. 25; fig. 7; Willoughby Append., p. 20, tab. I. 10 and I. 12; Valent., p. 386, fig. 120; Seba., tab. 24, fig. 11.

Ostracion sp., Artedi Synon., p. 85; No. 8 and p. 84; No. 6; Genera, pp. 55-56, Nos. 1 and 4; Gronov. Mus. 1, p. 54, No. 119; Zoophyl., p. 44, No. 173.

Os'racion tetragonus, L. Mus. Ad. Fred., p. 59; Bleek. Atl. Ichth. Ostrac., p. 39, pl. 1, fig. 2, and pl. 3, fig. 2; Gunth. in Fish. Zanz., p. 129; Day Fish. Malab., p. 254.

„ *tuberculatus*, L. Syst. Nat. 1, p. 409.

„ *cubicus*, L. l.c., p. 410; Bloch. Ausl. Fisch. 1., p. 115, tab. 137; Lacep. 1, p. 461, pl. 22, fig. 1; Rüpp. Atl. Fisch., p. 3; Bleek. Verh. Bat. Gen. 24; Balist., p. 35, pl. 7, fig. 14; Lefebv. Voy. Poiss., p. 238, pl. 8; Hollard. Ann. Sc. Nat., 1857, 7, p. 162.

Abu senduk, Forsk. Descr. An., p. 17, No. 48.

Ostracion deux-tubercules, Lacep. 1, p. 459.

„ *bi-tuberculatus*, Bl. Schn., p. 501.

„ *cyanurus*, Rüpp. Atl. Fische, p. 4, taf. 1, fig. 2; Hollard Ann. Sc. Nat., 1157, 7, p. 167.

„ *Argus*, Rüpp. l.c., fig. 1.

? *Ostracion maculatus*, Quoy. and Gaim. Voy. Uran. Zool., p. 218.

Ostracion immaculatus, Schleg. Faun. Japon. Poiss., p. 296; Bleek. Nat. Ichth. Japan, p. 55; Brev. Nat. Jap. Fish., p. 284.

„ *tesserula*, Bleek. Nat. Tydschr. Ned. Ind. 3, p. 305.

Frequently taken in the net about Cape York.

FAMILY GYMNODONTES.

143.—TETRODON VIRGATUS.

Rich. Voy. Ereb. and Terr. Fish., p. 62, pl. 39, figs. 8 and 9, and Voy. Herald Zool. p. 163, pl. 28, figs. 6 and 8. Bleek. Verh. Bat. Gen. 26, Blootk. p. 24, or Nat. Tydschr. Ned. Ind., 3, p. 299.

Tetrodon manillensis, Proce, Bull. Philom., 1822, p. 130.

Holacanthus pilosus, Gronov. Syst. ed. Gray, p. 28.

Dibolomycter longicadus, Bibron. Guer. Rev. Zool., 1865, p. 279.

Crayracion manillensis, Bleek. Atl. Ichth. Gymnod., p. 60, pl. 4, fig. 2.

Gunther in his Catalogue makes this species a variety of *Tetrodon immaculatus*, Lacep., and gives a very long list of synonyms. It was found at almost every place visited by the Chevert.

144.—TETRODON SCELARATUS..

Tetrodon sceleratus (Forst.) Gm. L. 1, p. 1444. Bl. Schn. p. 506. Lacep. 1, pp. 476-508.

Tetrodon argenteus, Lacep. Ann. Mus. d'Hist. Nat. 4, 1804, p. 211, pl. 58, fig. 2. Schleg. Faun. Japon. Poiss. p. 275, pl. 121, fig. 2. Bleek. Nat. Tydschr. Ned. Ind. 3, p. 737, and Atl. Ichth. Gymnod., p. 64, pl. 5, fig. 1.

Tetrodon argyropleura, Benn. Proc. Comm. Zool. Soc. 2, 1832, p. 184.

Tetrodon argentatus, Blyth in Kelaart's Prodr. Faun. Zeyl. 1, Append. p. 49.

Promecocephalus argentatus, Bibron. Brev. Zool. 1855, p. 279.

Tetraodon bicolor, Brev. Nat. Japan Fish. p. 283.

Taken at Hall Sound and Cape York.

145.—TETRODON OBLONGUS.

Tetraodon oblongus, Bl. Ausl. Fisch. 2, p. 6, t. 146, fig. 1. Lacep. 1, pp. 476-502. Bl. Schn. p. 504. Cant. Mal. Fish. p. 380. Bleek. Verh. Bat. Gen. 24, Blootk. p. 12, and Atl. Ichth. Gymnod. p. 62, pl. 4, fig. 4.

Physogaster oblongus, Müller Abhaml. Ac. Wiss. Berlin, 1839, p. 252.

Tetraodon alboplumbeus, Rich. Voy. Sulph. Ichth. p. 121, pl. 58, figs. 6 and 7, and Ichth. Chin. p. 199. Bleek. l. c. p. 62, pl. 1, fig. 1.

Tetraodon pæcilonotus, Schleg. Faun. Japan. Poiss. p. 270, pl. 124, fig. 2.

Tetraodon patoca, Bleek. Verh. Bat. Gen. 24, Blootk. p. 11.

Gastrophysus alboplumbeus, Bleek. Nat. Tydschr. Ned. Ind. 7, p. 104.

Tetraodon niveatus, Brevoort, Jap. Fish. p. 284.

Tetraodon Hartlaubii, Bianconi. Mem. Acad. Bologn. 6, p. 146, pl. 2, fig. 1.

Gastrophysus microphthalmus, Blyth. Journal. As. Soc. Beng. 29, 1861, p. 174.

We are not quite certain as to the identity of this species; our specimens are small—not exceeding four inches in length—and the spots have more of an ocellated appearance than accords with the descriptions. They were taken at Hall Sound.

We have now—with the exception of a few species inadvertently omitted and a number exceedingly minute, and probably immature, which we have intentionally passed over—completed the Teleosteous fishes in the collection. The sharks and rays, of which there are a considerable number, will probably be made the subject of another paper, but we have no immediate intention of proceeding with the investigation of them.

EXPLANATION OF PLATES.

Plate X.

FIG.

1. *Caranx Cheverti*, $\frac{2}{3}$ nat. size.
2. ,, *laticandis*, $\frac{1}{4}$ nat. size.
3. ,, *Papuensis*, $\frac{1}{2}$ nat. size.

Plate XI.

1. *Caranx bucculantus*, $\frac{1}{3}$ nat. size.
2. ,, *edentulus*, $\frac{1}{5}$ nat. size.
3. *Periophthalmus Australis*, $\frac{1}{3}$ nat. size.

Plate XII.

1. *Gobius Darnleyensis*, nat. size.
2. ,, *nigripinnis*, nat. size.
3. *Apocryptes lineatus*, nat. size.
4. *Gobiodon verticalis*, nat. size.

Plate XIII.

1. *Eleotris elongata*, nat. size.
2. *Salarias lineolata*, nat. size.
3. „ *geminatus*, nat. size.
4. „ *irroratus*, nat. size.

Plate XIV.

1. *Salarias filamentosus*, nat. size.
2. „ *auridens*, nat. size.
3. „ *cristiceps*, nat. size.

Plate XV.

1. *Mugil delicatus*, $\frac{1}{4}$ nat. size.
2. *Pomacentrus obscurus*, nat. size.
3. *Heptadecanthus longicaudis*, nat. size.

Plate XVI.

1. *Chaerops notatus*, $\frac{1}{3}$ nat. size.
2. *Cheilolabrus magnilabris*, $\frac{1}{4}$ nat. size.
3. *Pseudoscarius flavolineatus*, $\frac{1}{3}$ nat. size.

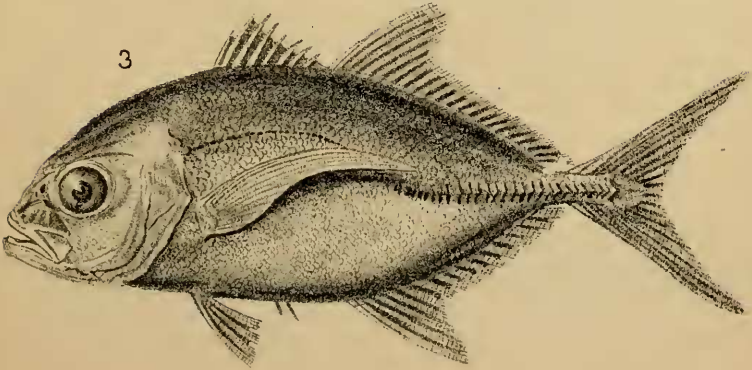
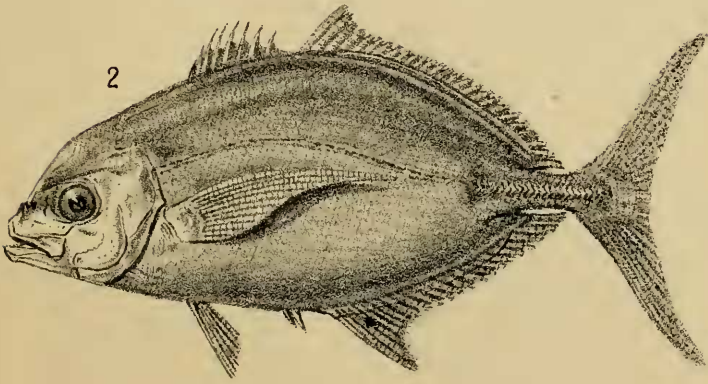
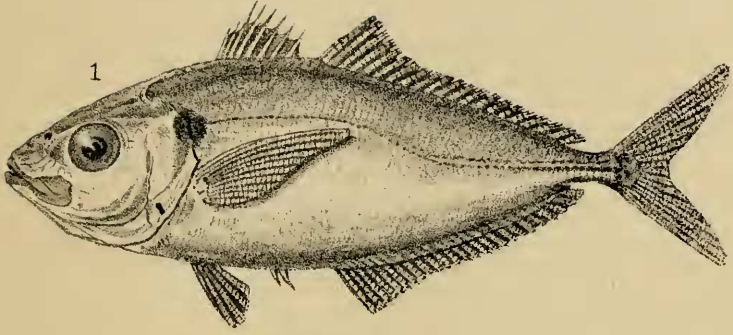
Plate XVII.

1. *Pseudoscarius nudirostris*, $\frac{1}{3}$ nat. size.
2. *Ichthyocampus maculatus*, $\frac{2}{3}$ nat. size.
3. *Monacanthus Cheverti*, $\frac{1}{2}$ nat. size.

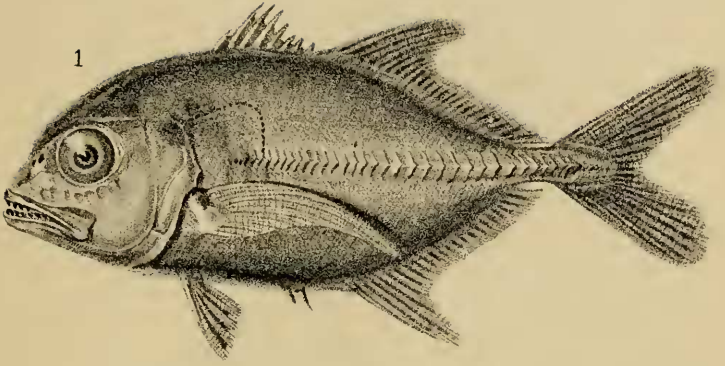


Description of a supposed New Species of Rock Wallaby from the Palm Islands, on the North-east Coast of Australia, proposed to be called *Petrogale assimilis*. By E. P. RAMSAY, F.L.S., Curator of the Australian Museum, Sydney.

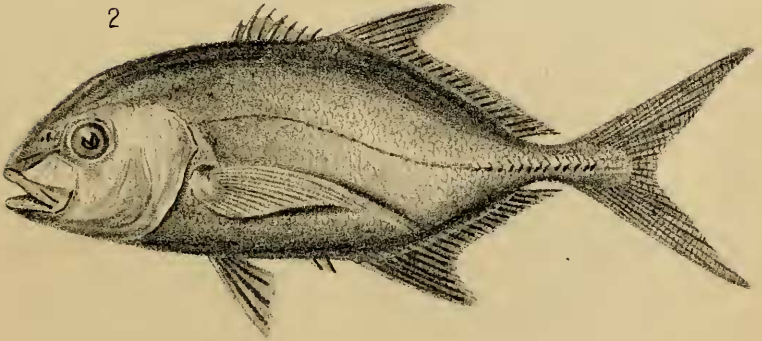
It having been proposed by Mr. Wm. Macleay that I should examine the collection of mammals obtained during the Chevert expedition, with a view of reporting thereon and describing any new species it might contain, I beg leave to lay before the Society this evening a description of what I believe to be a new species of Rock Wallaby, of the genus *Petrogale*. As the specimen is at pre-



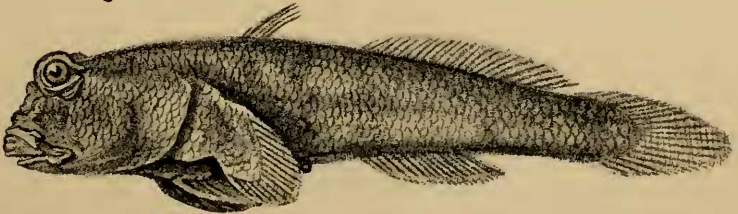
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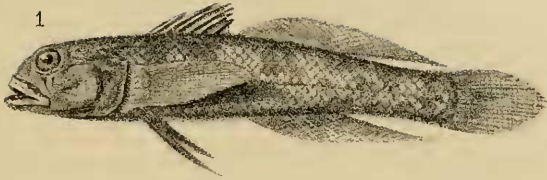
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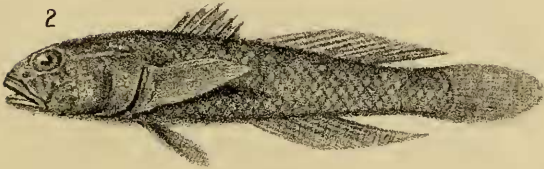
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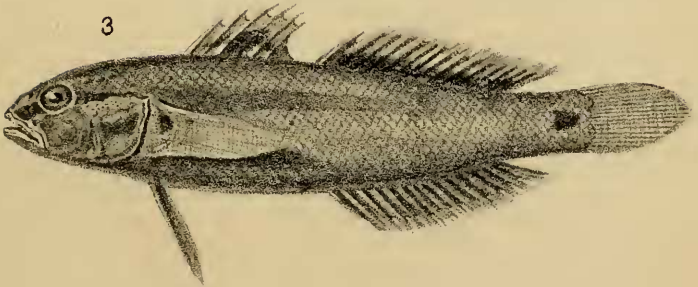
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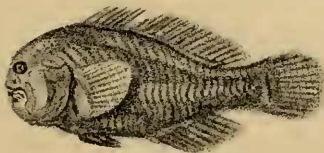
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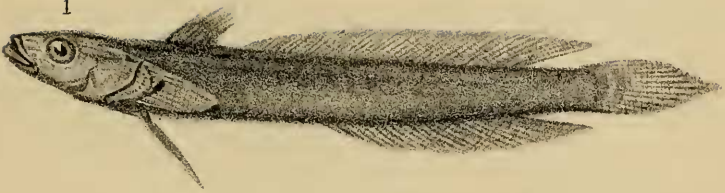
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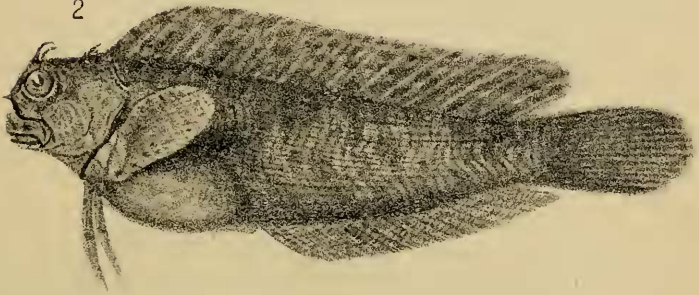
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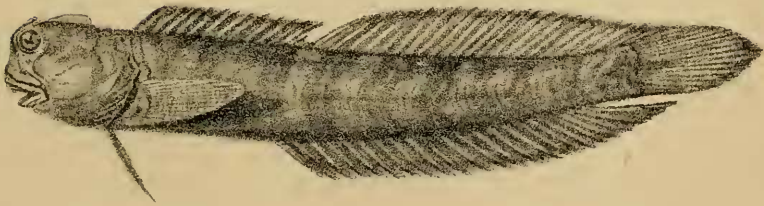
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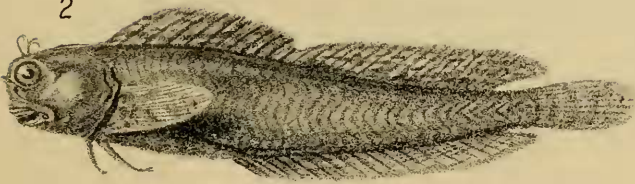


Plate XIV.

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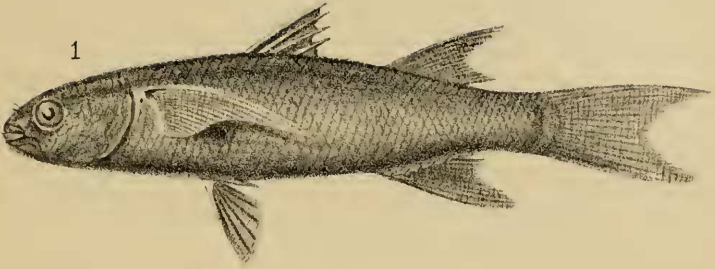
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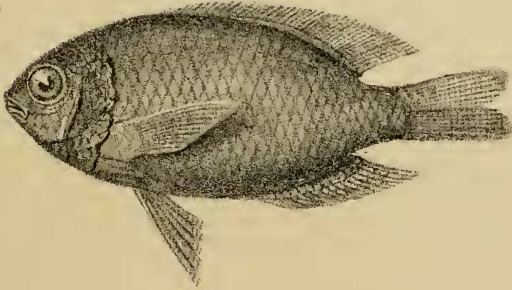
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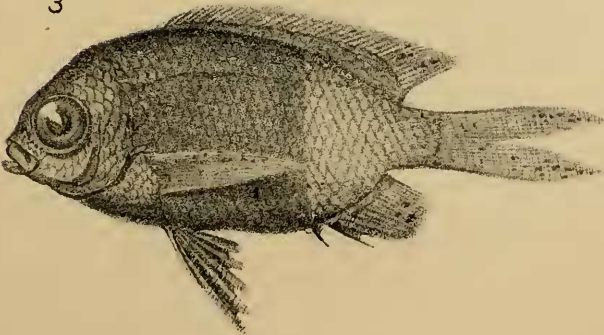
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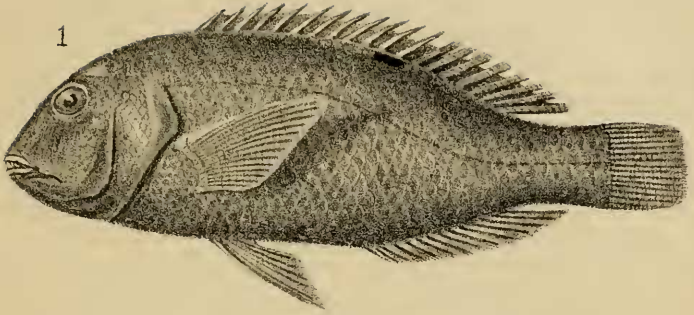
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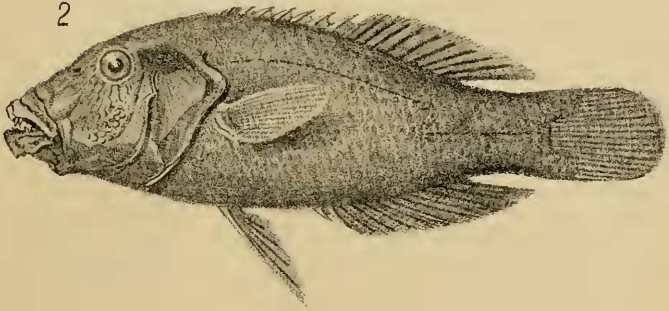
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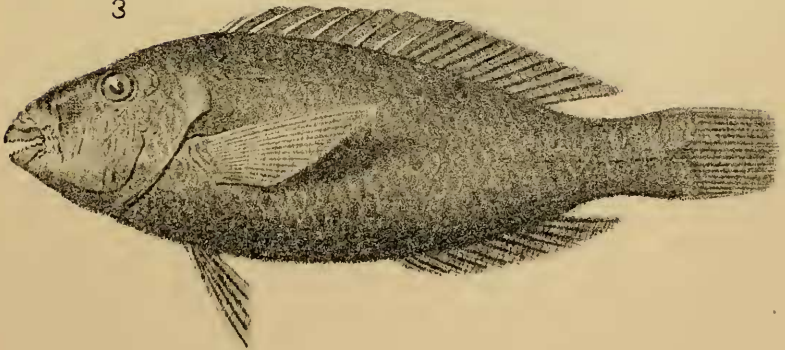
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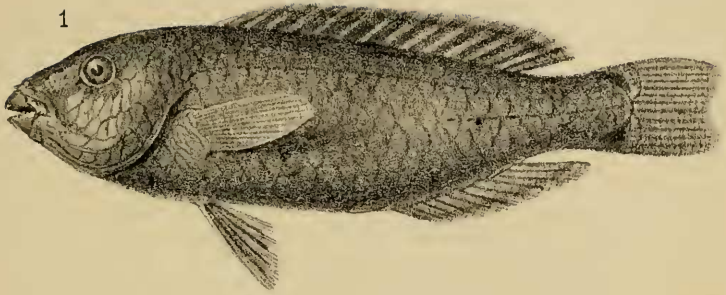
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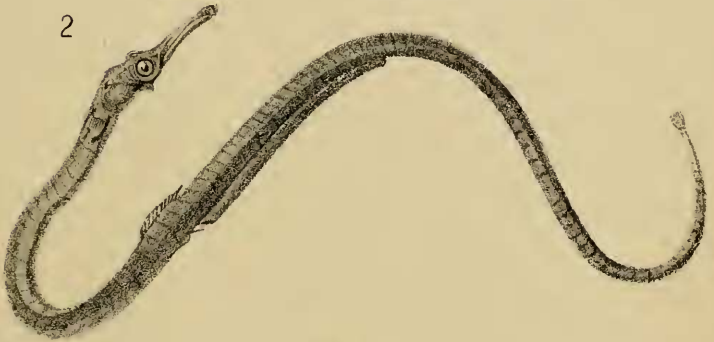
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